

WHAT IS CLAIMED IS:

1. In a door for closing/opening an opening of large
5 structure such as large depot and an airshed, etc., a half
spread folding door comprising:

plural door leaves having a predetermined width and
length;

a hinge means for connecting successively each door
10 leaf with adjacent door leaf along its width direction,
allowing each door leaf to be rotated around a hinge shaft
correlatively, and for folding each door leaf toward
alternative dead end of the door leaves sequentially; and

a spread confining means for limiting a spread range
15 of each door leaf in a predetermined angle to configure as
the form of zigzag when the door leaves are spread.

2. The half spread folding door as set forth in claim
1, wherein the spread confining means is comprised of:

20 a first hinge cylinder established at one side end of
the door leaf and enabling the hinge shaft go through, and
having a first notch at a lower portion of the first hinge
cylinder, the first notch having a form of a cut-off in a
predetermined angle around an axis of the first hinge
25 cylinder;

a second hinge cylinder established at an adjacent
side end of the adjacent door leaf to the door leaf and

enabling the hinge shaft go through, and having a second notch at an upper portion of the second hinge cylinder, the second notch having a form of a cut-off in a predetermined angle around an axis of the second hinge cylinder, the
5 angle being the same as one of the first notch, but overlapping in only certain value; and

a stopper attached on a circumference of the hinge shaft to nest in the overlap portion, restricting the rotation of each door leaf coupled with the hinge shaft.

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3. The half spread folding door as set forth in claim 1, wherein the spread confining means is comprised of a stopper that is installed projectedly at respective hinge end of a pair of door leaves coupled by the hinge means or
15 at a hinge end of only one door leaf.

4. The half spread folding door as set forth in claim 1, wherein the spread confining means is comprised of a flexible wire or rope having a predetermined length which
20 connects with each end of the door leaves coupled with the hinge shaft, all connected ends facing toward at least one side of the folding door.

5. The half spread folding door as set forth in claim
25 1, wherein the spread confining means is comprised of a sheet which connects with each end of the door leaves

coupled with the hinge shaft, all connected ends facing toward at least one side of the folding door.

6. The half spread folding door as set forth in claim
5 5, wherein the sheet is configured as the form of a single body that connects all ends of successive coupled door leaves.

7. The half spread folding door as set forth in claim
10 6, wherein the sheet is made by high tensile synthetic waterproof material.

8. The half spread folding door as set forth in claim
1, wherein the spread confining means is comprised of a
15 sheet which connects with each end of the door leaves coupled with the hinge shaft, all connected ends facing toward the outside of the folding door; and a flexible wire or rope having a predetermined length which connects with each end of the door leaves coupled with the hinge shaft,
20 all connected ends facing toward the inside of the folding door.

9. The half spread folding door as set forth in claim
8, wherein the sheet is configured as the form of a single
25 body that connects all ends of successive coupled door leaves and is made by high tensile synthetic waterproof material.